

REMARKS

Applicants initially note the recent history of this application:

- A Final Office Action issued on August 16, 2005;
- A Request for Continued Examination (“RCE”) under 37 C.F.R. § 1.114, a first Preliminary Amendment, and a Petition for Suspension of Action (37 C.F.R. § 1.103) were subsequently filed on January 17, 2006;
- Thereafter, the USPTO granted the Petition for Suspension of Action on January 24, 2006;
- Applicants then filed an Information Disclosure Statement (“IDS”) on February 22, 2006; and
- This present Preliminary Amendment now follows.

Thus, the instant Preliminary Amendment amends the claims with regard to the January 17, 2006 set of claims. Also, the Suspension of Action ends on April 17, 2006.

Applicants respectfully request the Examiner to reconsider the present application in view of the claim amendments and arguments presented in the first Preliminary Amendment of January 17, 2006 as well as the current preliminary amendments to the claims and accompanying remarks.

Status of Claims

In the present Reply, claim 1 has been amended. Thus, claims 1-18 are pending in the present application. No new matter has been added by way of the amendment to claim 1, since

this amendment actually deletes subject matter and has support in the originally filed claim.

Based upon the above considerations, entry of the present amendment is respectfully requested.

In view of the following remarks, along with the remarks of the first Preliminary Amendment of January 17, 2006, Applicants respectfully request the Examiner to withdraw all rejections and allow the currently pending claims.

Issues Under 35 U.S.C. § 112, First Paragraph

Claims 1-18 stand rejected under 35 U.S.C. § 112, first paragraph, for asserted lack of written description (see paragraphs 1-2 of the outstanding Office Action). As stated in the January 17 Preliminary Amendment, this rejection is rendered moot since claim 1 recites that the polymer is in the form of latex and is in the image-forming layer. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Issues Under 35 U.S.C. § 102(b)/§ 103(a)

Claims 1-18 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over the combination of Fukui *et al.* (Public. No. 2002/0102502; hereinafter “Fukui *et al.* ‘502”) (see paragraph 5 of the outstanding Final Office Action).

Also, claims 1-18 stand rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over EP 1 096310 (hereinafter “EP ‘310”) (see paragraph 6 of the Office Action).

Applicants respectfully traverse all rejections.

The Examiner’s particular comments to Applicants’ previous arguments can be seen in paragraph 8 of the Office Action. In forming the instant rejections, however, the Examiner has admitted that Fukui *et al.* ‘502 and EP ‘310 do not disclose that at least one of R⁰¹ and R⁰² in formula (M) is different from a hydrogen atom. Still, in order to cure the deficiency of either Fukui *et al.* ‘502 or EP ‘310, the Examiner has relied on the disclosure of *The Hackh's Chemical Dictionary* (4th Ed.) (page 116). As stated in paragraph 8 of the Final Office Action, the Examiner states: “The butadiene known in art encompasses the scope of the isoprene such as defined in *The Hackh's Chemical Dictionary*, Fourth Edition, and the percentage of the isoprene monomer claimed in the present claimed invention encompasses the scope of the butadiene monomer disclosed in the applied prior art of record.” (see page 6 of the Final Office Action).

Generally, in response to the above rejections, Applicants submit that the combination/modification of either Fukui *et al.* ‘502 or EP ‘310, and the reference to *The Hackh's Chemical Dictionary* (4th Ed.), is improper. In particular, Applicants respectfully disagree as to how “butadiene” is actually defined in *The Hackh's Chemical Dictionary* (4th Ed.). Further, each of the cited references fails to disclose the photothermographic material of the instantly claimed invention.

Definition of “butadiene” in *Hackh’s Chemical Dictionary*

Applicants respectfully submit that the Examiner’s dependence on *The Hackh’s Chemical Dictionary* (4th Ed.) reference is misplaced. *Hackh’s Chemical Dictionary* merely defines “butadiene” on page 116 as follows:

butadiene-* Bivinyl. **bromo-*** Bromoprene. **chloro-*** chloroprene. **methyl-*** Isoprene. **b.** dicarboxylic acid. Muconic acid.

One of skill in the art understands that this definition of “butadiene” merely states that butadiene corresponds to bivinyl; bromobutadiene is also called bromoprene; chlorobutadiene is also called chloroprene; methylbutadiene is also called isoprene; and the combination of butadinene and two carboxyl groups is called muconic acid.

In short, compounds related to butadiene are cited for reference purposes, but these same compounds (e.g., muconic acid) are defining “butadiene” itself. Accordingly, this definition in *Hackh’s Chemical Dictionary*, by no means, states that bromoprene, chloroprene, isoprene, muconic acid, and the like are within the scope of the definition of “butadiene”.

Based on a common understanding in the art, the term “butadiene” refers to CH₂=CHCH=CH₂, which is non-substituted. This definition/common understand is further supported by various dictionaries including (1) “Kagaku Daijiten” (*Comprehensive Chemical Dictionary*) (Kyoritsu Shuppan Co., Ltd.), p. 817, (2) *WEBSTER’S New Collegiate Dictionary*, p. 150, and (3) *RANDOM HOUSE WEBSTER’S COLLEGE DICTIONARY*, p. 179. Applicants herein attach copies of these various dictionary definitions.

The first attached dictionary excerpt from “Kagaku Daijiten” defines “butadiene” as follows (though in the Japanese language, the English translation is provided below):

butadiene (butadiene in English; Butadien in German)

(1) referring to the chained hydrocarbons having two double bonds whose carbon number is four, consisting of the two isomers of 1,2-butadiene and 1,3-butadiene.

Since the latter isomer is much important industrially, butadiene often refers to 1,3-butadiene. Regarding 1,2-butadiene, the item for methylallene can be referenced.

Similar to the Kagaku Daijiten definition, the other two dictionaries (*Webster's; Random House*) also define “butadiene” as being “C₄H₆” (and not, e.g., “isoprene” having five carbons as asserted in the Office Action).

In addition, Applicants respectfully submit that the meaning of the term “butadiene” used in Fukui *et al.* ‘502 and EP ‘310 must be a non-substituted butadiene, since the description of Fukui *et al.* ‘502 and EP ‘310 would be ambiguous otherwise. For instance, butadiene is used in the preparation of SBR latex in paragraph [0361], page 33, of Fukui *et al.* ‘502. If the term “butadiene” actually included different types of compounds, the skilled artisan would not understand what compound is being described and used in the Examples of Fukui *et al.* ‘502.

For the reasons described above, Applicant respectfully submits that the Examiner's interpretation of the term “butadiene” is improper. Instead, the term “butadiene” refers to non-substituted CH₂=CHCH=CH₂, as even supported by the multiple attached dictionary definitions,

and the term “butadiene” does not refer to, e.g., isoprene.

The Instant § 102 Rejections Have Been Overcome

With regard to both rejections cited under § 102, Applicants respectfully submit neither Fukui *et al.* ‘502 or EP ‘310 discloses all instantly claimed features. In this regard, Applicants respectfully refer the Examiner to claim 1 as amended herein. Also, though the Examiner relies on the *Hackh’s* definition of “butadiene,” compounds like muconic acid and isoprene are cited for reference purposes and are not referring to the actual definition of “butadiene” as asserted in the outstanding Office Action. Thus, each of Fukui *et al.* ‘502 and EP ‘310 fails to disclose all features as presently claimed. Because “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” each of the cited Fukui *et al.* ‘502 and EP ‘310 references cannot be a basis for a rejection under § 102. *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). These rejections have been overcome.

In addition, as discussed above, if the term “butadiene” actually included different types of compounds, the skilled artisan would not understand what compound is being described and used in the Examples of Fukui *et al.* ‘502. In this regard, Applicants note: “The single reference must describe and enable the claimed invention, including all claim limitations, with sufficient clarity and detail to establish that the subject matter already existed in the prior art and that its existence was recognized by persons of ordinary skill in the field of the invention.” *See Elan Pharmaceuticals Inc. v. Mayo Foundation for Medical Education and Research*, 64 USPQ2d

1292, 1296 (Fed. Cir. 2002) (citing *Crown Operations International, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002). There is no sufficient clarity and detail here if the skilled artisan cannot reproduce the examples in Fukui *et al.* ‘502.

Thus, based on the above, reconsideration and withdrawal of both anticipatory rejections are respectfully requested.

The Instant § 103(a) Rejections Have Been Overcome

With regard to the rejections cited under 103(a), these rejections have also been overcome. This is because U.S. case law squarely holds that a proper obviousness inquiry requires consideration of three factors: (1) the prior art reference (or references when combined) must teach or suggest all the claim limitations; (2) whether or not the prior art would have taught, motivated, or suggested to those of ordinary skill in the art that they should make the claimed invention (or practice the invention in case of a claimed method or process); and (3) whether the prior art establishes that in making the claimed invention (or practicing the invention in case of a claimed method or process), there would have been a reasonable expectation of success. See *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438, 1442 (Fed. Cir. 1991). Here, not even the initial requirement of disclosure of all claimed features has been satisfied. As explained above, neither Fukui *et al.* ‘502 nor EP ‘310 discloses “butadiene” as asserted in the Office Action and thus these references fail to describe all instantly claimed features.

Thus, the rejections under 35 U.S.C. § 103(a) have been overcome. Reconsideration and withdrawal of these rejections are respectfully requested.

Paragraph 5 of the Office Action and Unexpected Results for the Present Invention Rebutts the § 103(a) Rejections

Applicants note that in paragraph 5 (page 4, lines 7-8) of the outstanding Office Action, the Examiner states: “A *prima facie* case of obviousness may be made when chemical compounds have very close structural similarity and similar utilities.” *In re Payne*, *In re Papesch* and *In re Dillon* are also cited in the Office Action. Applicants respectfully submit these comments are inapplicable in view of the definition of “butadiene” as explained above. In other words, a *prima facie* case of obviousness has not been established since, e.g., the requisite disclosure of all claimed features has not been met.

Further, Applicants respectfully submit that the present invention has achieved unexpected results, whereby such results rebut any asserted *prima facie* case of obviousness (whether based on Fukui *et al.* ‘502, EP ‘310 or any other reference or combinations thereof). *In re Corkill*, 711 F.2d 1496, 226 USPQ 1005 (Fed. Cir. 1985); *see also In re Papesch*, 315 F.2d 381, 137 USP 43 (CCPA 1963); *In re Wiechert*, 370 F.2d 927, 152 USPQ 247 (CCPA 1967). As stated in M.P.E.P. § 2144.09 (see section entitled “*Prima Facie* Case Rebuttable By Evidence of Superior or Unexpected Results”), any rejection under 35 U.S.C. § 103(a) may be rebutted by a sufficient showing of unexpected results for the present invention.

Here, the copolymer used in the present invention provides remarkable improvement of image storability that is unexpected from the combinations of either Fukui *et al.* or EP ‘310 and *The Hackh’s Chemical Dictionary* (4th Ed.). Applicants’ position is supported by (1) the

experimental data generated from testing the Examples as described in the specification of the present application as well (2) in the Declaration (pursuant to 37 C.F.R. § 1.132) submitted on February 10, 2006 (which was in response to an Office Action of October 14, 2005) in U.S. Patent Application No. 10/722,553. This same Rule 132 Declaration is herein attached.

In the attached Rule 132 Declaration, the copolymers according to the presently claimed invention unexpectedly achieve at least 2 times better image storability than the copolymer disclosed in Fukui *et al.* '502. In particular, Applicants respectfully refer the Examiner to Table A at page 3 of the Declaration, which shows the inferior results of the three Comparative Examples (labeled as Sample Nos. 19-21) versus Inventive Sample Nos. 22-30 in, e.g., the "image storability ΔD_{min} after storage" properties. Applicants also request the Examiner to review the captions below Table A in the Rule 132 Declaration that refer to the Fukui *et al.* '502 embodiments. Therefore, Applicants submit that the presently claimed invention has achieved results that are unexpected in the art.

Thus, these rejections under § 103(a) in view of either Fukui *et al.* '502 or EP '310 (and in further view of the *The Hackh's Chemical Dictionary* (4th Ed.) reference) have been overcome.

Summary

As described above, neither of the cited Fukui *et al.* '502 or EP '310 references, even in combination with *The Hackh's Chemical Dictionary* (4th Ed.), discloses, teaches or suggests all instantly claimed features of the present invention. Further, the requisite motivation is lacking in

view of the achieved unexpected results of the present invention. Accordingly, Applicants respectfully submit that all rejections have been overcome and request allowance of all pending claims.

Conclusion

A full and complete response has been made to all issues as cited in the Office Action. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact Eugene T. Perez (Reg. No. 48,501) at the offices of Birch, Stewart, Kolasch & Birch, LLP.

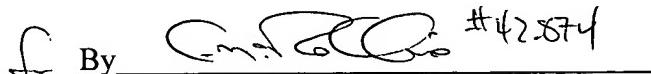
Art Unit 1752

Supplemental Preliminary Amendment

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: APR 14 2006

Respectfully submitted,

f By  #42874
Marc S. Weiner
Registration No.: 32,181
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000
Attorney for Applicant

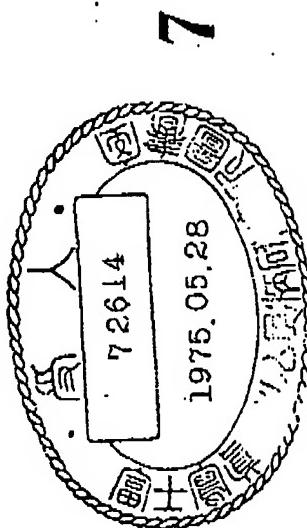
Attachments:

- "Kagaku Daijiten" (*Comprehensive Chemical Dictionary*) (Kyoritsu Shuppan Co., Ltd.), p. 817-818 (total of 3 pages)
- *WEBSTER'S New Collegiate Dictionary*, p. 150 (total of 2 pages)
- *RANDOM HOUSE WEBSTER'S COLLEGE DICTIONARY*, p. 179 (total of 2 pages)
- Declaration under 37 C.F.R. § 1.132

Kagaku Daijiten

化学大辞典

化学大辞典編集委員会編



ENCYCLOPAEDIA
CHIMICA

八二七三



共立出版株式会社



**RANDOM
HOUSE
WEBSTER'S
COLLEGE
DICTIONARY**

Random House
New York

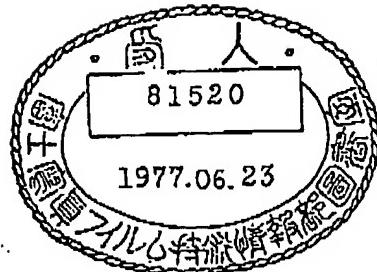
busty o buttinsky

bustly \büs'-të\ adj **bustier**, **-est** : having a large bust
bustulose \büstü-lös'\ adj (butane + sulfuryl) : an antineoplastic agent $\text{C}_4\text{H}_9\text{OS}_2$ used in the treatment of chronic myelogenous leukemia

busy \bëz'\ adj **busi-er**, **-est** [ME bïȝ, fr. OE bïȝig; akin to MD**&** MLG *bësch* *bës*] 1 a : engaged in action **OCCUPIED**: being in use **in** (around the telephone → 2 b : full of activity
bustling **ca** **seaports**) 2 b : bodily or intrusively active
MEANINGLY 4 : full of distracting detail **ca** **design** → **busily** \bëz'-ä-lik\ adv — **busy-ness** \bëz'-nës\ n
SIN **BUSY**, INDUSTRIOUS, PUGNACIOUS, ASSIDUOUS: shareable meaning element : actively engaged or occupied (as in work or leisure) in accomplishing an end. **BUSY** stresses activity as opposed to idleness or leisure **<had plenty of work to keep him busy>** but does not in itself convey anything about the utility or effectiveness of the activity **<always too busy to get a job finished>** **INDUSTRIOUS** implies habitual or characteristic attentiveness and persistence, earnest application (as to work or a business) **<an industrious boy>** always ready to help his father. **PUGNACIOUS** suggests earnest application to a particular occupation **<a diligent student>** **ASSIDUOUS** stresses careful and unrelenting application **<assiduous in his attention to his bride>** **SEDULOUS** implies painstaking and persevering application **<taking sedulous care of her husband's needs>** **ant** **idle** **unoccupied**

busy vb **bëz-ëd**; **busying** n : to make busy : OCCUPY → **occupy** → **occupy** → **occupy**
bustle \bëz'-üls\ n : **small boats** **busted** to and fro — **Quentin Crewe**
busy-body \bëz'-bëd-ë\ n : an officious or inquisitive person
busy-work \wëk'-wërk\ n : work that uses, appears productive or of intrinsic value but actually only keeps one occupied
butter \bët'\ n [ME biter, prop. & conj., outside without, except, except that akin to OHG *bizen* without, except both in a philological WGmc compound whose constituents are represented by OE *bie* and *OHG* *bian* outside, akin to OE *biz* outside — more at BYE, OUT] 1 a : except for the fact **<would have protested — that he was afraid>** b : THAT — used after a negative **<there is no doubt ~ he won>** c : without the concomitant that **<it never rains ~ it pours>** d : if not : UNLESS **<a suburban ~>** e : **sooner** started — it stopped 2 a : on the contrary **<than ~ sooner started — it stopped>** 2 b : on the contrary **<on the other hand : NOTWITHSTANDING — used to connect coordinate elements <she was called ~ he did not answer>** **<not peace ~ a sword>** b : YET **<for or proud>** c : with the exception of — used before a word often taken to be the subject of a clause **<none ~ the brave deserves the fair — John Dryden>** — but where **<that ... ~ I don't know but what I will go>**
but prep 1 **Scot** a : WITHOUT, LACKING b : OUTSIDE 2 a : with the exception of : **<warning ~ do one thing ~ me>** — compare **but** 2c b : other than **<this letter is nothing ~ an insult>**
but adv 1 ONLY, MERELY **<he is ~ a child>** 2 **Scot** : OUTSIDE 3 : to the contrary **<who knows ~ that he may succeed>**
but mon : that not : who not **<nobody ~ has his fault — Shakespeare>**
but \bët'\ n [Sc. but, ad. (outer)] **Scot** : the kitchen or living quarters of a house, esp. a **tenement**
butane \bët'-ün\ n [ISV *bürtig* + -ane] : either of two isomeric flammable gaseous paraffin hydrocarbons C_4H_{10} , obtained usu. from petroleum or natural gas and used as a fuel
butanol \bët'-üñl'\ n, pl. -ols : either of two butyl alcohols $\text{C}_4\text{H}_9\text{OH}$ derived from normal butane
butcher \bët'-cher\ n [ME boucher, fr. OF *boucher*, fr. bœuf, he-goat, prob. of Gmc origin; skin to Mfr bœuf he-goat — more BUCK] 1 a : one who slaughters animals or dresses them **beast** 2 : a dealer in meat 3 : that which kills ruthlessly or brutally 4 : BOTCHER 4 : a vendor esp. on trains or in theaters
butcher w/butcher-ed: **butcher-er** \bët'-är\ 1 : to slay and dress for market **<hog>** 2 : to kill in a barbarous manner 3 : BOTCH **<~ed the play beyond recognition>** — **butcher-a-ner** \bët'-är-nër\ n
butcher-bird \bët'-är-bërd\ n : any of various shrikes
butcher knife : a heavy-duty knife usu. six to eight inches long having a broad blade that curves slightly at the tip
butcher-owl \bët'-ör-öwl\ adj : resembling a butcher : SAWACE
butch'er-s-broom \bët'-ür-s-brüm', -brüm'\ n : European leafless shrub (*Ruscus aculeatus*) of the lily family with stiff-pointed leaflike twigs used for brooms
butchery \bët'-ë-re\ n, pl. -ries 1 **chiefly Brit** : SLAUGHTERHOUSE 2 : the preparation of meat for sale 3 : cruel and ruthless slaughter of human beings 4 : BOTCH syn see **MASACRE**
butylene \bët'-ü-leñ\ n [ISV *bütyl* + -ene] : a normal butylene
buttoe \bët'-ü-ë\ n [pl. -ës] [NL genus name, fr. L. *bi* a bow : any of a genus (*Buteo*) of hawks with broad rounded wings at soaring flight; broadly : a hawk of similar appearance or habit flight] 1 : **buttoe-nine** \bët'-ü-ñ-në\, **buttoe** \bët'-ü-ë\ adj or n
butler \bët'-ü-lə\ n [ME *bouteillier*, fr. OF *bouteilleur* bottle bearer, *bouteille* bottle — more at BOTTLE] 1 : a manservant having charge of the wines and liquors 2 : the chief male servant of a household who has charge of other employees, receives guests, directs the serving of meals, and performs various personal services
butler's pantry n : a service room between kitchen and dining room
butt \bët'\ vb [ME *buten*, fr. OF *buter*, of Gmc origin; skin to OHG *butan* to *bæsi* — more at SEAT] 1 : to thrust or push hard 2 : foremost : strike with the head or horns → 3 : to strike or shoot with the head or horns
buttn : a blow or thrust usu. with the head or horns.
buttn \n [ME partly Fr. MF but (aret), chd. of Gmc origin; skin to ON *bun* log, LG *bun* blunt; partly Fr. MF *bûte* backstop] 1 : target 1 a : a backstop (as a mound or bank) for catching missiles shot at a target 2 b : TARGET c pl: RANGERS 2 d : a blind for shooting birds 2 a obs : LIMIT, BOUND b : arched : **<where is my journey's end, here is my ~ — Shakespeare>** 3 : an object of abuse or ridicule : VICTIM **<she was the ~ of all their jokes>**

bunt *v* **b** (partly fr. *bunt*, partly fr. *burn*) *v* : ASLT — used or against ~ *n* 1: to place end to end or side to side so as to overlap 2: to trim or square off (as a log) at the ends 3: to reduce (as a cigarette) to a butt by stubbing or plucking **butt** *n* [ME, prob. akin to ME *bouttock* buttock, LG *bunt*] OHG *būtan* to heat] 1: BUTTROCKS 2: the large or thick part of something: a: a lean upper cut of the pork shoulder; b: the base of a plant from which the roots spring c: the handle end of a tool or weapon 3: an unused remainder; the part of a hide or skin corresponding to the animal's tail sides **buttress** *n* [ME, fr. MF *boutre*, fr. OProv *bora*, fr. LL *būtūs*] large cask esp. for wine, beer, or water 2: any of various liquid capacities: esp. 1 a measure equal to 108 imperial gallons **butte** *n* [Vasl. *būti*] 1: knoll, fr. MF *bute* mound of earth said to be a backstop; an isolated hill or small mountain with steep precipitous sides usu. having a smaller summit area than the main peak 2: buttermilk 3: a solid emulsion of fat globules, air, and water made by churning milk or cream and used as food 2: a substance: a: any of various fatty oils remaining needful at ordinary temperatures b: a food spread made from fruit or other food (apple ~) 3: FLATTERY — buttermilk *n* 1: to spread with or as if with butter 2: BUTTER-ON-Eggs *n* [bot-o-ro-néggz, -négz] *n* pl: sing. *consimilis* a common European perennial herb (*Laurus nobilis*) of the laurel family that has showy yellow and orange flowers and is a naturalized weed in much of No. America — called *wood-lavender* **butterball** *n* [bot-o-ró-ból] *n* 1: a chubby person 2: BUTTER-BEAN *n* 1: WAX BEAN 2: LIMA BEAN; BEAN CUCUMBER & Midland: a large dried lima bean 3: SIEVA BEAN 3: shell bean esp. as opposed to a snap bean **butter-claws** *n* : either of two large delicate flowering plants (*Solidago multiradiata* and *S. gigantea*) of the Pacific coast of America **buttercup** *n* [bot-o-krup] *n* : any of numerous plants of the family Ranunculaceae, the buttercup, with yellow flowers and pedately lobed leaves **butter-fat** *n* [bot-o-fat] *n* : the natural fat of milk and chief constituent of butter consisting essentially of mixture of glycerin, butyric, oleic, and palmitic acids **butter-fingered** *adj* : apt to let things fall through the fingers: CARLESS — *butter-fingers* *n* : but *stug* or *in cover* **butter-fish** *n* [fish] *n*: any of numerous mostly pelagic fishes of the family Stromateidae with slippery coating of scales **butterfly** *n* [bot-o-flí] *n*, often *anab* 1: any of numerous winged land insects (order Lepidoptera) with large broad wings and brightly colored wings 2: something that resembles or suggests a butterfly: esp. 1: a person chiefly occupied with the pleasure of butterflies 3: a swimming stroke executed in a prone position moving both arms in a circular motion while keeping the legs down simultaneously 4: *pl*: a feeling of bowness or uneasiness caused esp. by emotional or nervous tension or anxious anxiety **butterfly** *v* *flied*; *fly-ing* : to split almost entirely apart <*as butterflied steaks*> *butterflied shrimp* **butterfly bush** *n* : *verbena* **butterfly chair** *n* : a chair for lounging consisting of a seat supported by a frame of metal tubing or bars **butterfly-fly** or *\butter-flíy* *n* : a swimmer who speaks the butterfly **butterfly fish** *n* : a fish having variegated colors, breed esp. in the Indian ocean **butterfly fin** *n* : any of a family (Chaetodontidae) of brilliantly colored piano-finned fishes of tropical seas with deep body and fins partly covered with scales **butterfly valve** *n* 1: a double check valve 2: a damper in a pipe consisting of a disk turning on a diametral axis **butterfly weed** *n* : an orange-flowered showy milkweed (*Asclepias*) of eastern No. America **butter-milk** *n* [bot-o-milk] *n* 1: the liquid left after milk has been curdled from milk or cream 2: cultured milk made by addition of suitable bacteria to sweet milk **butter-nut** *n* [bot-o-nút] *n* 1: the edible oily nut of an American hickory (*Juglans cinerea*) of the walnut family 2: a tree bearing the nut **butter-nut** *n* 2: a light yellowish brown esp. overall dyed brown with a butternut extract *c*: a partisan of the Confederacy during the Civil War **butter-scotch** *n* [skatch] *n* : a candy made from brown corn syrup, and water, often: the flavor of such candy moderate yellowish brown **butter up** *v* *w* to charm or beguile with lavish flattery: CAJOLE **butter-weed** *n* [bot-o-wéd] *n* : any of several plants with yellow flowers or smooth soft foliage: as: a: HOHNECKIA; b: an American ragwort (*Senecio glabellus*) **butter-wort** *n* [wórt, wórf] *n* : any of a genus (*Pinguicula*) of herbs of the bladderwort family with fleshy greasy leaves that produce a viscid secretion serving to capture and digest insects **buttery** *n* [bot-o-rí] *n*, *pl* *teries* [ME *butterie*] 1: a bottle cask, butt — more at BUTT 2: a superstore for a chiefly dried food: PANTRY 3: a room (as in an English country house) for storage of provisions for sale to students **buttery** *n* [bot-o-rí] *adj* 1: *o*: having the qualities or appearance of butter 2: containing or spread with butter; marked by flattery **butt hinge** *n* : a hinge usu. mortised flush into the edge **butt in** *v* : to meddle in the affairs of others: INTERFERE **butt-in-sky** also **butt-in-skyl** *n* [bot-o-in-skí] *n*, *pl* *ektori* [ME *bettyn*] 1: *zjazd* (last element in many Slavic names) 2: butting in: a troubousome meddler



WEBSTER'S
New
Collegiate
Dictionary

bustier to butterfly shell

179

- often insolently, as a familiar term of address to a man or woman. *Watch it, Buster!* 4. a spree. 5. **ARONCOBUSTER**. [1825-35, Amer.] *bust* (boos t^əs), n. 1. a woman's close-fitting, sleeveless, strapless usu. with boning to give it shape, worn as a blouse. [1975-80; < *bust* (boos t^əs), v., -tied, -tling, n. —v.i. 1. to move or act with a show of energy (often fol. by about); busting about in the room. 2. to abound in something; an office bustling with activity. 3. to cause to bustle; hustle. —n. 4. energetic and often noisy activity. [1615-25; ME *bustelen* to hurry along] —*bust'er*, n. —*bust'ly*, adv.
- bustle* (bus'əl), n. 1. a projecting pad or framework formerly worn under the back of a woman's skirt to support and display the drapery of a fabric. [1780-90; orig. uncert.] —*bustled*, *adj.*
- bust-line* (bus'lin'), n. 1. the outline or shape of a woman's bust. 2. a part of a garment covering the breasts. [1935-40]
- topology*, n. **Computers**. an arrangement of computers on a local-area network in which each computer is connected to a central node through which data is channeled.
- break-up*, n. **Informal**. 1. a separation or dissolution, as of a marriage, breakup. 2. a noisy party. 3. **Brit**. a quarrel. [1840-50]
- busty* (bus'tē), adj., *bust-i-er*, *bust-i-est*. (of a woman) having a large bust; bosomy. [1940-45] —*bustiness*, n.
- buzz* (biz'ē), adj. *buzz-ier*, *buzz-iest*, v., *buzzed*, *buzz-ing*. —adj. 1. actively and attentively engaged, esp. in work. 2. not at leisure; otherwise engaged: He's busy and can't see you. 3. full of activity: a busy life. 4. (of a telephone line) in use. 5. meddlesome; prying. 6. cluttered with small, fussy details: The rug is too busy for this room. —v.t. 7. to keep occupied; make or keep busy. [bef. 1000; ME *busten*] —*busily*, adv.; *busi-g*, —*busi-ly*, adv.; —*busi-ness*, n.
- buzz-boddy* (biz'ē bod'ē), n. pl. *bod-dies*. a person who pries into or meddles in the affairs of others. [1520-30]
- buzz-sig-nal*, n. (on a telephone line) a rapid succession of buzzing tones, indicating that the number called is in use. [1890-95]
- buzz-work* (biz'ē w^{rk}'), n. work often of little productive value assigned so that a person will be occupied or look busy. [1840-50]
- but* (but; unstressed bat), conj. 1. on the contrary: My brother went, but my sister did not. 2. and yet; nevertheless: strange but true. 3. except; save: did nothing but complain. 4. without the circumstance that: It never rains but it pours. 5. otherwise than: There is no hope but by prayer. 6. that (used esp. after doubt, deny, etc., with a negative): I don't doubt but you'll do it. 7. that ... not: No leaders ever existed but they were optimists. 8. (used to introduce an exclamatory expression): But that's wonderful! 9. **Informal**, than: It no sooner started raining but it stopped. —prep. 10. with the exception of: No one replied but me. 11. other than nothing but trouble. —adv. 12. only; just: There is but one answer. —n. 13. buts, reservations or objections: You'll do as you're told, but no buts about it. —*Idiom*. 14. but for, except for; were it not for. [bef. 900; ME *buten*; OE *butan* for phrase *be utan* on the outside, without] —Usage. When *but* is understood as a conjunction the pronoun following it is understood as the subject of an incompletely expressed clause, the pronoun is in the subjective case: Everyone lost faith in the plan but she (did not lose faith). In virtually all contexts, when *but* is understood as a preposition, the pronoun following it is in the objective case: Everyone lost faith but her. The prepositional use is more common. When *but* and its following pronoun occur near the beginning of a sentence, the subjective case often appears: Everyone but she lost faith in the plan. See also AND, HOWEVER, THAT.
- buttered-gum* (byoo'tə d^əm), n. a colorless, flammable gas, C₂H₄, used chiefly in the manufacture of rubber and paint and in organic synthesis. [1895-1900; *buta*(NE) + *-t^əed* + *-g^əum*]
- butterane* (byoo'tə nē), n. a colorless, flammable gas, C₂H₁₀, used chiefly in the manufacture of rubber and as fuel. [1870-80]
- butter-alcohol* (byoo'təl əl'kōōl), n. **BUTYL ALCOHOL**. [1890-95]
- butch* (booch), adj. 1. **Slang**. a. (of a woman) having traits of behavior. b. (of a male) exaggeratedly masculine for his associates with males. 2. (of a male) having a manner of讲话. 2. of or designating a haircut in which the hair is closely cropped. —n. 3. **Slang**. a butch person. [1940-45]
- butch'er*, n. —*Syn*. See SLAUGHTER.
- bucche-bird* (booch'ə b^{ird}'), n. 1. any of several Eurasian or North American shrikes of the genus *Lanius*. 2. any of various large, heavy-billed, highly vocal songbirds of the genus *Cracticus*, of Australia and New Guinea. [1660-70]
- butch'er-block*', n. a slab of wood formed by bonding or gluing together thick laminated strips of wood in alternating light and dark shades. [1835-45] —*butch'er-block'*, adj.
- butch'er-broom*', n. a shrubby European evergreen, *Ruscus aculeatus*, of the lily family, used for making brooms. [1555-65]
- butch'er-ry* (booch'ə rē), n., pl. -ries. 1. brutal or wanton slaughter of animals or humans. 2. the trade of a butcher. 3. **Brit**. a slaughterhouse. 4. the act of bungling or botching. [1300-50; ME < AF, MF] —*butcher*, n. 1. Also, **Bute-shire** (byoo'tə shēr, -shār). a historic county. [byoo'tə] 2. an island in the Firth of Clyde, in SW Scotland: part of the county Bute. 7733; 50 sq. mi. (130 sq. km).
- bute-e-ne* (byoo'tē nē), n. **BUTYLENE**.
- bute-o* (byoo'tē ə), n., pl. -os. any of various soaring hawks of the genus *Buteo*, of both the Old and New Worlds, having broad wings and a wide, rounded tail. [1905-10; < NL; L *buteo* a kind of hawk or falcon] —*bute-o-nine* (-nēn', -nin), adj., n.
- butterel* (buflər), n. the chief male servant of a household, usu. in charge of wines and liquors, the serving of meals, and the supervision of other servants. [1250-1300; ME *butterel* < AF *butterel*; see BUTTER]
- But-ler* (buflər), n. 1. Benjamin Franklin, 1818-93, U.S. politician and Union general in the Civil War. 2. Samuel, 1612-80, English poet. 3. Samuel, 1835-1902, English novelist and satirist.
- butterel's pantry*, n. a service room between a kitchen and dining room. [1810-20]
- butt* (but), n. 1. the end or extremity of anything, esp. the thicker, larger, or blunt end considered as a base, support, or handle: the butt of a rifle. 2. an end that is not used or consumed; remnant: a cigar butt. 3. a lean cut of pork shoulder. 4. **Slang**, the buttocks. 5. **Slang**, a cigarette. [1400-50; late ME *bott* (thick) end, buttock, OE *bott* tree stump (in place names); akin to Sw *bott* stump; cf. surtock]
- butt²* (but), n. 1. an object of witicism, ridicule, etc. 2. a target. 3. (on a target range) a wall of earth or other backstop located behind the targets to stop bullets, arrows, etc. 4. butts, a target range. 5. Obs. a goal; limit. —v.t. 6. to abut. 7. to position or fasten an end [of something]. 8. to join the ends of (two things); sct. end to end. [1350-1400; ME < MF *but* target, goal, prob. < ON *butr* *butr*, from the use of a wooden block or stump as a target in archery, etc.]
- butte³* (but), v.t. 1. to strike or push with the head or horns. —v.i. 2. to strike or push something or at something with the head or horns. 3. to project. 4. butt in (or out), to interfere (or stop interfering) in the affairs or conversation of others. —n. 5. a blow with the head or horns. [1150-1200; ME < AF *buter*, OF *bouter* to thrust, strike < Gmc]
- butte⁴* (but), n. 1. any of various units of capacity, usu. considered equal to two bushels. 2. a large cask for wine, beer, or ale. [1350-1400; ME *bote* < AF *bo(u)t(e)*; MF < OPr *bota* < LL *botta*, *bottis*]
- butte* (byoo't), n. an isolated hill or mountain rising abruptly above the surrounding land, esp. in the western U.S. and Canada. [1650-60; Amer.; < North American F; F: low hill, mound]
- butterer* (buflər), n. 1. a soft whitish or yellowish fatty solid that separates from milk or cream when it is churned, processed for cooking and table use. 2. any of various other soft spreads for bread: *apple butter*, *peanut butter*. 3. any of various substances of butterlike consistency, as certain vegetable oils solid at ordinary temperatures: *cacao butter*. —v.t. 4. to put butter on or in. 5. to apply a liquefied bonding material to a (piece or area), as mortar to a course of bricks. 6. *butter up*, to flatter, esp. so as to gain a favor from. [bef. 1000; ME; OE *buter* < L *būtūrum* < Gk *būtūrion* = *bou-*, comb. form of *bous* cow' + *-tūron*, n. dcr. of *tūros* cheese] —*butter-less*, adj. —*butter-like*, adj.
- butter-and-eggs*', n., pl. *butter-and-eggs*. (used with a sing. or pl. v.) any of several plants whose flowers are of two shades of yellow, as the toadflax. [1770-80]
- butter-ball* (buflər b^{all}'), n. 1. a chubby person. 2. **Northeastern U.S.** the butchifhead. 3. a small spherical pat of butter. [1930-35]
- butter-bean*' or *butter-bean'*, n. 1. a variety of small-seeded lima bean, *Phaseolus lunatus*, grown in the southern U.S. 2. **Midland and Southern U.S.** any type of lima bean. [1810-20]
- butter-cup* (buflər k^{üp}), n. any of numerous plants of the genus *Ranunculus*, having glossy yellow flowers and deeply cut leaves. [1505-15]
- butter-fat* (buflər f^{at}'), n. the fatty portion of milk, from which butter is made, consisting of a mixture of glycerides. [1885-90]
- butter-fin-gers* (buflər fin'gərz), n., pl. -gers. (used with a sing. v.) person who frequently drops things; clumsy person. [1830-40] —*butter-fin-gered*, adj.
- butter-fish* (buflər fish'), n., pl. (esp. collectively) *-fish-es*. (esp. for kinds or species) fish, a small, flattened marine food fish, *Peprius macrurus*, of U.S. Atlantic coastal waters. [1665-75]
- butter-fly* (buflər flī'), n., pl. -flies, v., -flied, -fly-ing. —n. 1. any of numerous flying insects of the order Lepidoptera that are active by day, characterized by clubbed antennae, a slender body, and broad, often conspicuously marked wings. 2. a person who flits aimlessly from one interest or group to another: a social butterfly. 3. *butterflies*. (used with a pl. v.) informal a queasy feeling, as from nervousness or excitement. 4. a racing breaststroke in which the swimmer brings both arms out of the water in forward, circular motions and kicks the legs up and down together. —v.t. 5. to slit open and flatten (food) to resemble the spread wings of a butterfly: *butterflied shrimp*. [bef. 1000; ME *butterfle*, OE *butterfleoge*. See *butter*, *fleoge*]
- butterfly bush*', n. *Buddleia*. [1930-35]
- butterfly chair*', n. a chair in which a canvas sling is suspended from a metal frame by its corners, forming a wide back and seat.
- butterfly effect*', n. a cumulatively large effect that a very small natural force may produce over a period of time. [1980-85; so called from the notion that the fluttering of a butterfly's wings may set off currents that will grow into a large storm]
- butterfly fish*' or *butterfly-fish*', n. any of various colored tropical fishes of the family Chaetodontidae, having deep, narrow bodies and darting movements suggestive of a butterfly. [1735-45]
- butterfly shell*', n. *coquina*.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.